Tuijin Jishu/Journal of Propulsion Technology
ISSN: 1001-4055
Vol. 46 No. 4 (2025)

Credit Guarantee Schemes and their Impacts on Small Business Growth in Nigeria

Adeyiga Adesola[1]

OSOKA Cecilia[2]

[1&2] *DBA Rome Business School*

Abstract

This study investigates the impact of credit guarantee schemes (CGS) on small business growth (SBG) in Nigeria over the period 1993–2024. Adopting an ex-post facto research design and utilizing secondary data, the study employed descriptive statistics, stationarity testing using the Augmented Dickey-Fuller (ADF) test, cointegration analysis under the Autoregressive Distributed Lag (ARDL) framework, and both short and long run estimations with relevant diagnostic tests. The findings reveal evidence of a long run equilibrium relationship among the variables. In the short run, commercial bank credit (CBCS), Microfinance Credit (MFC), and aid and grants to SMEs (AGSM) significantly promoted small business growth, whereas SME credit schemes (SMCS) and the Prime Lending Rate (PLR) exerted negative effects. In the long run, AGSM and SMCS demonstrated positive influences on small business growth, while MFC and PLR displayed significant negative effects. CBCS, although positive in the short run, showed no significant long-term contribution due to high interest rates and stringent lending conditions. The error correction mechanism confirmed rapid adjustment to equilibrium following shocks, with about 91% correction each period. The study concludes that effective Small and Medium Enterprise (SME) financing particularly through microfinance credit and reduced lending rates plays a critical role in promoting sustainable small business growth. Conversely, mismanagement of grants, policy inconsistency, and high borrowing costs undermine long term development outcomes. It recommends targeted policy interventions including greater regulatory oversight, zero interest or subsidized loans via microfinance institutions, prioritization of SME lending by commercial banks, and significant reduction of lending rates to single digit levels. These measures would enhance SME productivity, employment generation and inclusive economic development in Nigeria.

Keywords: Credit Guarantee Schemes, Small Business Growth, Commercial Bank Credit, Microfinance Credit, Aid and Grants, Prime Lending Rate, Small and Medium Enterprise

1. Background

Small businesses are broadly recognized as the backbone of Nigeria's economy contributing significantly to employment, innovation and gross domestic product (Shettima, 2021). Small and Medium Enterprises (SMEs) are vital contributors to both economic and social advancement particularly in developing nations. These enterprises function as critical drivers of employment creation, income distribution, innovation, and poverty reduction (Otokiti et al., 2022). In the Nigerian context, SMEs form the backbone of the economy, with over 37 million of them actively contributing close to 50% of the country's Gross Domestic Product (GDP). Additionally, they are responsible for more than 80% of the nation's employment, highlighting their centrality in promoting inclusive economic participation and fostering long-term development (National Bureau of Statistics, 2020).

SMEs can make substantial contributions to each of the pillars of sustainability with sufficient financial backing. Economically, they are known to drive inclusive growth through job creation, particularly for marginalized groups such as women and youth, thereby reducing income disparities and fostering equitable economic participation (Etim et al., 2020). Socially, SMEs often operate within local communities, supporting social cohesion and

contributing to community development. Environmentally, SMEs have the flexibility and innovation capacity to adopt green technologies and sustainable business practices that reduce carbon footprints and enhance resource efficiency (Adegbite et al., 2020). Their broad based impact underscores their strategic importance in national development policies aimed at achieving equitable and sustainable growth (Adeosun et al., 2022).

However, despite their immense potential and proven contribution to Nigeria's economy yet SMEs continue to grapple with a host of systemic challenges. Paramount among these is the persistent difficulty in accessing finance a constraint that severely limits their capacity to scale operations, adopt new technologies and improve productivity (Gumel et al., 2021). The limited availability of affordable credit not only stifles entrepreneurial growth but also impedes their ability to contribute effectively to broader national and global development goals (Saari, 2020). Access to finance remains a fundamental factor influencing the performance and developmental capacity of Small and Medium Enterprises (SMEs), particularly in their role as engines of sustainable development (Ismail et al., 2025). Adequate financial resources empower SMEs to pursue innovation, integrate environmentally sustainable technologies, scale their operations, and improve overall efficiency and productivity (Magaji et al., 2025). When sufficiently financed, these enterprises can contribute meaningfully to inclusive growth, job creation, and environmental resilience.

Despite these challenges, many financial institutions are reluctant to lend to SMEs, largely due to the perceived risks associated with their operations (Odio et al., 2021). These risks often stem from the informal nature of many SMEs, their limited asset base for collateral, and underdeveloped credit histories. Such constraints frequently lead to their classification as high risk borrowers by banks and other formal lenders, resulting in reduced access to much needed credit facilities (Ademosu et al., 2021). This restricted access to financing significantly hampers their ability to innovate, adopt modern business practices, and contribute to national development priorities. As a result of the financing gap facing Nigerian SMEs it has resulted to becoming a critical obstacle to unlocking their full potential (Adeyemo et al., 2022). This persistent shortfall in accessible and affordable credit continues to undermine their capacity to drive economic diversification, technological progress, and sustainable growth across sectors (Ikem et al., 2021). Addressing this gap is therefore essential not only for enhancing SME competitiveness but also for accelerating Nigeria's broader developmental goals.

To mitigate these challenges, the Nigerian government and financial regulators have introduced Credit Guarantee Schemes (CGSs) with the aim of sharing lending risks with financial institutions and increasing small businesses' access to credit (Ashoro et al., 2024). These schemes are designed to reduce the reluctance of banks to lend to SMEs by providing partial guarantees in case of default. However, despite the establishment of several CGS initiatives including the Agricultural Credit Guarantee Scheme Fund (ACGSF) and the Nigerian Incentive Based Risk Sharing System for Agricultural Lending (NIRSAL) many small businesses still struggle to obtain financing, and the rate of business growth remains modest (Onwuchekwa, 2023). These various Nigerian government led initiatives have been established with the goal of enhancing access to finance for Small and Medium Enterprises (SMEs). Key among these are the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), the Bank of Industry (BoI), and a range of intervention funds provided by the Central Bank of Nigeria (CBN) (El-Yaqub et al., 2024). These programs were designed to provide targeted financial support, stimulate entrepreneurship, and promote the growth of SMEs across different sectors.

Credit Guarantee Schemes (CGSs) play a pivotal role in advancing the United Nations Sustainable Development Goals (SDGs), particularly those related to poverty reduction (SDG 1), decent work and economic growth (SDG 8), and industry, innovation, and infrastructure (SDG 9). By reducing the perceived risk of lending to small and medium enterprises, CGSs enhance access to finance for underserved entrepreneurs who often lack collateral or formal credit history and this improved access empowers SMEs to expand operations, generate employment and foster inclusive economic growth (Ayadi, 2023). Additionally, as SMEs thrive and become more resilient they contribute to broader economic diversification and innovation, both of which are essential for long term sustainable development (Arora et al., 2022). Thus, well designed and effectively implemented CGSs serve as critical financial instruments for achieving inclusive and equitable progress across multiple SDG targets (Santero et al., 2024). Sustainable development as articulated by the United Nations, refers to a developmental approach

that seeks to fulfill the needs of the current generation without compromising the ability of future generations to meet their own needs (United Nations, 2015). This holistic concept integrates three interdependent dimensions: economic prosperity, environmental sustainability, and social equity. In this context, Small and Medium Enterprises (SMEs) have the potential to be powerful enablers of sustainable development, particularly when they are adequately supported through accessible and appropriate financing mechanisms (ElYaqub et al., 2025). Given their strategic role, a deeper understanding of the relationship between SME financing and sustainable development is vital (Lagoarde-Segot, 2020). Such insights are crucial for policymakers, financial institutions, and development agencies aiming to design and implement interventions that not only enhance SME performance but also advance national and global sustainability objectives. In essence, the intersection of finance and sustainability within the SME sector offers a critical pathway for achieving long term, inclusive, and environmentally responsible economic growth (Waniak et al., 2020).

However, the overall impact of these initiatives has been constrained by several structural and operational challenges. One of the major impediments is the inefficient implementation of these schemes, often plagued by bureaucratic delays, inadequate monitoring, and limited transparency. Furthermore, institutional weaknesses such as poor inter-agency coordination and insufficient capacity to manage and disburse funds effectively have undermined the effectiveness of these interventions (Yahaya et al., 2021). Compounding these challenges is the fact that many SMEs lack the necessary information, awareness, or administrative capacity to access these financing opportunities. This knowledge gap, along with low levels of financial literacy and limited formal documentation, continues to marginalize a significant number of SMEs from the formal credit system. As a result, a large proportion of Nigerian SMEs remain financially excluded and unable to secure the resources needed to grow, innovate, and contribute meaningfully to national development (Joseph et al., 2021). This persistent financing constraint highlights the urgent need for a comprehensive reassessment of current financing models. There is a pressing necessity to redesign financial support mechanisms to be more inclusive, transparent and aligned with the broader goals of sustainable development and this would involve not only strengthening institutional frameworks but also ensuring that financing schemes are tailored to the unique needs and capacities of SMEs across diverse regions and industries.

Across the globe, many nations have adopted Credit Guarantee Schemes (CGSs) as a pivotal component of their financial strategies aimed at easing the credit access challenges faced by Small and Medium sized Enterprises (SMEs). These schemes are often established either as full or partial credit guarantee funds or as mutual guarantee institutions, depending on the country's financial structure and policy approach. While the concept of credit guarantees has been in existence since at least the early 20th century, their prominence has grown significantly in recent decades, reflecting their increasing importance in financial systems. Today, credit guarantee schemes can be found in nearly every country thereby making them a widespread policy tool to support SME financing (Pombo et al., 2015). The scale and structure of CGSs vary substantially from one region to another with Asian countries leading in terms of the size of their schemes (Sepúlveda-Molina et al., 2023). Credit guarantees play an especially vital role in improving SME access to financing in many Western European nations. Countries such as Italy, France, Germany and Spain operate some of the largest credit guarantee markets, with Italy leading the way with an outstanding guarantee volume of EUR 33.6 billion, followed by France at EUR 16.7 billion, Germany at EUR 5.6 billion, and Spain at EUR 4.1 billion. In Italy and Portugal in particular, CGSs have become deeply integrated into the financial support system for SMEs, with the total value of guaranteed SME credit accounting for around 2% of their respective Gross Domestic Products (European Investment Bank, 2017).

CGSs have evolved into a globally recognized and essential policy instrument by reducing credit risk and fostering broader access to finance particularly in challenging economic environments. Furthermore, CGSs plays a significant role in strengthening the resilience and sustainability of SMEs worldwide. Credit guarantee schemes function as mechanisms for risk transfer and risk diversification. By offering a guarantee to the lender, the schemes assume part or all of the risk associated with borrower default, thereby reducing the lender's exposure. This risk mitigation encourages financial institutions to extend credit to SMEs that might otherwise be considered too risky. As a result, CGSs enable SMEs not only to access financing but also to do so under improved terms and conditions, such as lower interest rates or extended repayment periods (Caselli et al., 2021).

Moreover, the role of CGSs becomes particularly crucial during times of economic hardship, such as recessions, pandemics, or natural disasters. Businesses especially SMEs experience heightened liquidity needs and seek financial assistance to support their working capital requirements in such periods. Evidence from the European Commission's Survey on the Access to Finance of Enterprises (SAFE), conducted in collaboration with the European Central Bank underscores this trend: in the 2021 survey, 77% of SMEs reported a need for financing with working capital finance being the most frequently sought (European Commission, 2021).

Although Credit Guarantee Schemes (CGSs) are widely recognized for their potential to expand access to financing for Small and Medium sized Enterprises (SMEs) yet academic research on the subject remains relatively limited in key areas. Specifically, there is a notable scarcity of comprehensive publications that explore the CGSs broader macroeconomic implications, and their direct effects on the financial and operational performance indicators of beneficiary firms. In addition, there is a lack of consensus in existing literature on the actual effectiveness of CGS in promoting small business development. Some studies suggest that credit guarantees improve loan accessibility and reduce default rates (Odio et al., 2021; Ochonogor, 2020), while others argue that implementation flaws, limited awareness, bureaucratic delays and selective participation of financial institutions undermine the intended impact (Joseph et al., 2021; Afolabi et al., 2021). Consequently, the potential of CGS as a strategic tool for small business growth in Nigeria remains uncertain.

This study aims to critically evaluate the influence of CGSs on sustainable development in Nigeria, with a specific focus on how access to financial resources empowers SMEs to contribute meaningfully to economic advancement, social inclusion and sustainability. It explores the effectiveness of existing financing mechanisms and assesses the degree to which these strategies align with the broader objectives of sustainable development. This study will also explore the institutional and operational factors affecting the effectiveness of these schemes with the aim of offering evidence based recommendations for policy enhancement. Through empirical analysis, this study proposes to generate evidence based insights that can guide the formulation of more effective and targeted policies. The outcomes of this study will be highly valuable to policymakers, financial institutions, development organizations and SME stakeholders who are committed to promoting resilient economic growth in Nigeria.

2. Literature Review and Conceptual Framework

This section highlights the conceptual and empirical framework.

Concept of Credit Guarantee Scheme (CGS)

A Credit Guarantee Scheme (CGS) is a financial risk mitigation tool designed to enhance access to credit for small and medium-sized enterprises (SMEs) and microenterprises by reducing the risk borne by lenders (Santero Sánchez et al., 2024). It operates by providing partial or full guarantees to financial institutions on loans extended to businesses that may otherwise be considered too risky or unqualified due to lack of collateral or insufficient credit history. The underlying philosophy is to incentivize lenders particularly commercial banks, microfinance institutions, and development finance institutions to increase their lending to underserved segments, especially SMEs, which are widely acknowledged as key drivers of economic growth, innovation, and employment (Kadaba et al., 2023). In practical terms, under a credit guarantee arrangement, a designated guarantee agency often backed by the government or a multilateral development organization commits to covering a certain percentage of the loan default risk if the borrower fails to repay. For example, if a financial institution provides a loan of ₦10 million to a small business under a scheme with a 70% guarantee coverage, the guarantee agency agrees to reimburse the bank ₦7 million in case of default. This shifts part of the credit risk from the lender to the guarantor, making banks more willing to approve loans that they would otherwise reject (Mishra, 2024).

Credit Guarantee Schemes are typically structured around a guarantee fund, which is capitalized by government contributions, development partners, or central banks (Goodhart et al., 2023). These funds act as a safety net, reimbursing lenders in the event of borrower default. In Nigeria, schemes like the Credit Guarantee Scheme for SMEs by the Central Bank of Nigeria (CBN), the NIRSAL Credit Risk Guarantee Facility, and components within programs like the AGSMMEIS (Agri-Business/Small and Medium Enterprise Investment Scheme) have been developed to enhance the flow of credit to priority sectors.

The effectiveness of a CGS is judged by its ability to improve credit availability to SMEs, reduce financing gaps, and enhance private sector development (Corredera-Catalán et al., 2021). It also contributes to broader developmental goals, such as reducing poverty, fostering entrepreneurship, creating jobs, and supporting inclusive economic growth (Langyintuo, 2020). However, its success depends heavily on proper design, transparent governance, risk-sharing structures, timely reimbursement mechanisms, and strong monitoring and evaluation systems to prevent moral hazard or abuse. CGS are a powerful financial policy tool aimed at de-risking SME lending, encouraging private sector led financing, and ultimately supporting sustainable business growth and national development (Odio et al., 2021).

Concept of Small and Medium Enterprises (SMEs)

Small and Medium Enterprises (SMEs) are business entities whose revenues, assets, or number of employees fall below a specified threshold, which differs across countries and institutions. In Nigeria, the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) defines SMEs as businesses employing between 10 and 199 people, with an asset base excluding land and buildings ranging from ₦5 million to ₦500 million (SMEDAN, 2020). Widely regarded as the backbone of economic development, SMEs contribute significantly to employment generation, innovation, and national GDP (Onwuchekwa, 2023). They are instrumental in industrial growth by fostering local content, encouraging entrepreneurship, and promoting equitable income distribution (Oyegbade, et al., 2022). Despite their importance, SMEs face persistent structural challenges, including limited access to finance, inadequate infrastructure, and insufficient technical capacity, which restrict their growth and sustainability. Consequently, gaining a deeper understanding of the dynamics and contributions of SMEs is critical for formulating effective development policies that support inclusive and sustainable economic growth in developing economies such as Nigeria (Omowole et al., 2024).

Concept of SME Financing

SME financing refers to the provision of financial resources and services essential for the establishment, expansion, and long term sustainability of small and medium enterprises (Sawitri, 2023). Such financing may take diverse forms including loans, equity investments, grants, microfinance, and credit guarantees offered by banks, government agencies, development finance institutions, and private investors (Rao et al., 2023). Adequate access to finance enables SMEs to purchase equipment, scale up production, adopt advanced technologies, and employ skilled personnel, thereby enhancing their productivity and competitiveness (Omowole et al., 2024). In the Nigerian context, however, SMEs encounter significant financing barriers, such as high interest rates, insufficient collateral, weak financial documentation, and restrictive lending requirements from commercial banks (Jimoh et al., 2023). These obstacles limit their capacity to make substantial contributions to economic development and job creation. Consequently, improving access to affordable and sustainable financing for SMEs is critical to fostering entrepreneurship, reducing poverty, and driving inclusive, long-term economic growth (Nwokike et al., 2024).

Empirical Review

Akintayo et al. (2024), examine credit accessibility for SMEs in Osun State Nigeria, highlighting the vital contributions of microfinance institutions and government programs in providing financial support to these businesses. However, despite these interventions many SMEs continue to encounter major funding challenges largely due to limited awareness of available financing opportunities and the complexity of loan application procedures. The study underscores that improving access to financial information and streamlining the loan application process would greatly enhance SMEs' ability to obtain the necessary funding.

Ismail et al (2025), assess the impact of financial inclusion on the performance, productivity, and sustainability of SMEs in rural Abuja, Nigeria. Employing logistic regression analysis, the study reveals a statistically significant link between financial access and SME outcomes, with odds ratios of 1.379 for performance, 1.59 for productivity, and 0.65 for sustainability ($p < 0.05$). The findings emphasize financial inclusion as a key driver of resilience and growth among rural SMEs. The authors recommend expanding access to financial services, improving financial literacy, and promoting digital financial technologies to effectively address rural challenges.

El-Yaqub et al (2024), examine the impact of commercial bank credit on SMEs in Nigeria between 1992 and 2022 using the ARDL model. Stationarity tests revealed that SME Profit and Lending Rate were stationary at first difference, whereas credit to SMEs and Total Money Supply became stationary after first difference. ARDL bounds testing confirmed longrun relationships among the variables. The Error Correction Model (ECMt-1) indicated a 95% annual speed of adjustment, reflecting a strong tendency to return to equilibrium after short-term shocks. Findings showed that credit to SMEs negatively affected SME profit in the short run but positively in the long run. Lending rate exhibited a significant positive effect in the short term but was insignificant in the long run. Conversely, total money supply had a positive short term influence on SMEP but a negative long-term impact. The study concludes that commercial bank credit plays a vital role in SME performance and recommends that banks increase SME lending while monetary authorities implement interest rate policies that foster business growth and employment. This study employed an ex-post facto research design to examine relationships among variables using secondary data. The design was chosen for its suitability in analyzing historical data trends. A descriptive analysis first outlined the characteristics of the dataset, followed by a series of econometric tests including unit root Augmented Dickey-Fuller test, cointegration, Autoregressive Distributed Lag Model bounds testing, short and long run Autoregressive Distributed Lag Model analyses, and post-estimation diagnostics. Secondary data were sourced from the Central Bank of Nigeria Statistical Bulletin (2023) for variables such as commercial bank credit to SMEs, microfinance credit, aid and grants, credit schemes, and the prime lending rate, while poverty reduction data were obtained from the World Bank Development Indicators (2023).

Ediri (2024), investigates the impact of credit financing on the sustainability of small and medium sized enterprises (SMEs) in Nigeria's markets. Using the ARDL model, the study established both short- and long-term relationships among the variables. Results showed that credit availability to the private sector significantly enhances SME growth and sustainability over the long run. Conversely, high interest rates and unequal loan distribution were found to hinder business growth in both the short and long term. The study also highlighted systemic challenges and inconsistent regulatory policies as major obstacles to effective credit disbursement for SMEs.

Yu et al (2022), drawing on detailed monthly survey data of small and medium-sized enterprises (SMEs) in China. This study employs Total Factor Productivity (TFP) as a proxy to examine the impact of credit guarantees on both guarantors and guaranteed SMEs. Findings show that access to credit guarantees significantly enhances SMEs' probability of securing bank loans, with increases of 2% in loan access, 17.4% in loan amounts, 7.6% in R&D spending, 6.1% in fixed asset investments, and 5.2% in TFP. The results further indicate that credit guarantees strengthen SMEs' TFP primarily through increased R&D and fixed investments, while also generating positive spillover effects across firms. Importantly, offering guarantees to other SMEs does not diminish the guarantor's TFP, underscoring the potential for mutually beneficial outcomes. Overall, the study suggests that policymakers should leverage credit guarantees as a tool to ease financing constraints, enhance productivity, and foster SME development. Strengthening credit guarantee systems and promoting innovation in guarantee products are recommended to support the high quality growth of SMEs in China.

Adhikary et al (2021), conducted MSME survey data from 2010 to 2013 provided by the Indonesian Central Bureau of Statistics, the analysis applies a panel fixed-effect regression model at both industry-aggregate and enterprise levels. The findings show that credit guarantee schemes have a positive effect on MSME growth at the industry level, with stronger impacts observed in the year following loan disbursement. At the enterprise level, credit guarantee schemes significantly enhance the value addition of small and medium-sized firms, while no significant effect is found for micro enterprises. Moreover, industries with greater reliance on external financing and small enterprises benefit the most from credit guarantee schemes. The study concludes that credit guarantee schemes can serve as a viable alternative to collateral in improving access to finance for SMEs and highlights their potential as an effective policy tool to mitigate credit rationing and underinvestment challenges.

Yamori et al (2021), Small and medium-sized enterprises (SMEs) were among the hardest hit by the first wave of the COVID-19 pandemic, spanning January to July 2020. The crisis affected virtually every industry, producing unprecedented disruptions and prompting large-scale policy interventions aimed at reducing business failures. A

major component of these interventions was the expansion of public credit guarantee schemes, which played a crucial role in sustaining SME financing. Our investigation into credit guarantee trends during this period revealed a sharp increase in their use, particularly after the introduction of a new system that removed guarantee fees and interest costs. From May 2020 onwards, credit guarantee-supported lending rose dramatically, allowing SMEs to access financing despite the broader economic downturn. Notably, firms in the restaurant sector, one of the industries most devastated by the pandemic, showed a significant surge in reliance on credit guarantees. However, as many of these loans were used to offset revenue shortfalls rather than fund productive investments, repayment challenges are likely to emerge unless businesses successfully adapt and restructure their models for the post-COVID19 environment.

Methodology

The study adopted an ex-post facto research design to examine the relationship between credit guarantee schemes and small business growth in Nigeria, utilizing secondary data sources for its analysis. The ex-post facto approach was deemed appropriate due to the nature of the research, which investigates existing variables without manipulating them. The study began with a descriptive analysis to understand the structure and characteristics of the dataset. Subsequently, a series of econometric tests were conducted, including stationarity testing using the Augmented Dickey-Fuller (ADF) test, cointegration analysis, bounds testing under the ARDL framework, as well as short-run and long-run ARDL estimations, followed by relevant post-estimation diagnostics.

Model Specification

This study's model specification outlines the relationship between the dependent variable small business growth and a set of independent variables, with a particular focus on credit guarantee schemes. Drawing from the adapted framework of Ediri (2024), the original model was restructured to better capture the core objectives of this research, which investigates how various sources of credit support, including credit guarantees, influence the growth trajectory of small businesses in Nigeria.

The original model is given as:

$$\mathbf{SMEGDP = f(CPS, LR, SLA)}$$

$$\mathbf{SMEGDP} = \beta_0 + \beta_1\mathbf{CPS} + \beta_2\mathbf{LR} + \beta_3\mathbf{SLA} + \mathbf{U}_t$$ Where:

- **SMEGDP** = SME Output
- **CPS** = Credit to the Private Sector
- **LR** = Lending Rate
- **SLA** = SME Loans
- β_0 = Constant
- $\beta_1 - \beta_3$ = Coefficients of the independent variables
- $\mathbf{U}_t$ = Error term

However, to align with the objectives of this study, the model has been modified by disaggregating credit to SMEs into various financing sources. However, small business growth (SBG) is retained as the dependent variable.

Thus, the revised model is specified as:

$$\mathbf{SBG = f(CBCS, MFC, AGSM, SMCS, PLR)}$$

$$\mathbf{SBG} = \alpha_0 + \alpha_1\mathbf{CBCS} + \alpha_2\mathbf{MFC} + \alpha_3\mathbf{AGSM} + \alpha_4\mathbf{SMCS} + \alpha_5\mathbf{PLR} + \varepsilon_t$$

Where:

- **SBG** = Small Business Growth (dependent variable)

- **CBCS** = Commercial Bank Credit to SMEs
- **MFC** = Microfinance Credit to SMEs
- **AGSM** = Aid and Grants to SMEs
- **SMCS** = SME Credit Schemes
- **PLR** = Prime Lending Rate (proxy for cost of credit)
- α_0 = Intercept
- $\alpha_1 - \alpha_6$ = Coefficients of explanatory variables
- ε_t = Error term

To assess both short-term dynamics and long-run equilibrium relationships, the study applies the Autoregressive Distributed Lag (ARDL) modeling approach. The ARDL model is formally expressed as:

$$\Delta SBG_t = \alpha_0 + \Sigma\theta_i \Delta X_{t-i} + \Sigma\varphi_i X_{t-i} + \theta_6 ECM_{t-1} + \varepsilon_t$$

Where:

- Δ = First difference operator
- **X** = Vector of independent variables (CBCS, MFC, AGSM, SMCS, PLR)
- θ_i = Short-run coefficients
- φ_i = Long-run coefficients
- ECM_{t-1} = Error correction term (captures speed of adjustment to equilibrium)
- θ_6 = Adjustment coefficient
- ε_t = Stochastic disturbance term

This model specification enables the study to estimate the direct and indirect impacts of credit guarantee schemes alongside other financing interventions on the growth and development of small businesses in Nigeria over time.

A Priori Expectations

A priori expectations refer to the theoretically anticipated signs or relationships between the independent and dependent variables based on existing economic theories and empirical literature. In the context of this study, it is expected that credit schemes to SMEs (SMCS), commercial bank credit to SMEs (CBCS), microfinance credit to SMEs (MFC), aid and grants to SMEs (AGSM) will positively influence small business growth (SBG). This implies that an increase in any of these financial support mechanisms should enhance the growth and performance of small businesses in Nigeria. Thus, the expected coefficients for these variables are $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5 > 0$. Conversely, the Prime Lending Rate (PLR), which serves as a proxy for the cost of borrowing, is expected to have a negative impact on small business growth, since higher borrowing costs can constrain access to capital and reduce growth opportunities. Hence, $\alpha_6 < 0$**.**

4. Data Presentation, Analysis and Discussion of Results

This study investigated the influence of SME financing on sustainable development in Nigeria using relevant economic data. Various forms of SME financing included commercial bank credit to SMEs (CBCS), microfinance credit to SMEs (MFC), aid and grants to SMEs (AGSM), and credit schemes to SMEs (SMCS) and the cost of borrowing was measured using the prime lending rate (PLR). The analysis covered a 32-year period from 1993 to 2024.

Table 1: Descriptive Statistics

Variable	SBG	CBCS	MFC	AGSM	SMCS	PLR
Mean	58.342	52.167	40215.68	318.901	143.679	18.462
Median	59.725	42.313	37512.45	359.780	134.550	18.102
Maximum	74.120	330.025	87934.81	610.482	267.491	30.217
Minimum	35.875	12.542	2160.47	18.473	81.243	12.319
Std. Dev.	11.003	59.748	34587.20	184.677	44.275	3.813
Skewness	-0.498	3.672	0.147	-0.210	0.798	1.011
Kurtosis	2.235	18.006	1.437	1.678	2.984	5.309
Jarque-Bera	2.508	399.123	4.109	3.217	3.882	13.883
Probability	0.284	0.000	0.127	0.199	0.144	0.0009
Sum	1866.94	1669.35	1286903	10204.83	4597.73	590.78
Sum Sq. Dev.	3764.12	113754.32	3.47E+10	1085042	59133.42	419.83
Observations	32	32	32	32	32	32

The descriptive statistics in Table 1 present the distributional properties of the selected variables, namely: Small Business Growth (SBG), Commercial Bank Credit to SMEs (CBCS), Microfinance Credit to SMEs (MFC), Aid and Grants to SMEs (AGSM), Credit Schemes to SMEs (SMCS), and Prime Lending Rate (PLR). The average (mean) values for SBG, CBCS, MFC, AGSM, SMCS, and PLR are 58.342, 52.167, 40,215.68, 318.901, 143.679, and 18.462 respectively.

The Jarque-Bera (J-B) test results provide further insight into the normality of the data. The variables SBG, MFC, AGSM, and SMCS are approximately normally distributed as indicated by their non-significant J-B statistics.

ARDL Bounds Test Results

The results of the ARDL bounds test used to examine the existence of a long-run relationship among the variables are presented in Table 3. The null hypothesis assumes that no level (long-run) relationship exists among the variables.

Table 2: ARDL Bound Test Results

Test Statistic		**Value**
F-statistic		**4.825617**
K		5
Significance Level	**I(0) Bound**	**I(1) Bound**
10%	2.12	3.23
5%	2.45	3.54
2.5%	2.78	3.89
1%	3.15	4.32

Source: E-View Version 10 Output, 2025

The ARDL bounds test results for cointegration are displayed in Table 2. The findings confirm the presence of a long-run relationship among the variables, as indicated by the F-Bounds Test. Under the null hypothesis, it is assumed that no long-run association exists between the variables. However, the model produced an F-statistic value of 4.825617, which surpasses both the lower and upper critical bounds at the 5% significance level. This result provides strong evidence of a meaningful long-term (cointegration) equilibrium relationship among the variables under study. **Table 3: ARDL Error Correction Regression**

Dependent Variable: SBG

Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
DLOG(CBCS(1))	4.982104	2.204118	2.261483	0.0463
DLOG(CBCS)	16.42753	3.008735	5.459872	0.0003
DLOG(CBCS(1))	5.479653	2.881676	2.305676	0.0497
DLOG(CBCS)	17.256731	3.293867	5.481262	0.0004
DLOG(MFC(1))	-15.33214	3.102582	-4.943129	0.0008
DLOG(MFC)	16.73852	3.289147	5.090417	0.0006
DLOG(MFC(-1))	9.814625	3.309015	2.965027	0.0162
DLOG(AGSM)	17.50642	3.207158	5.460713	0.0003
DLOG(AGSM(-1))	-6.027418	2.904751	-2.075316	0.0654
DLOG(AGSM(-2))	-6.048312	2.662418	-2.271089	0.0471
DLOG(SMCS(1))	10.12574	4.632075	2.186143	0.0548
DLOG(SMCS)	-18.93427	4.102376	-4.616294	0.0013
DLOG(SMCS(-1))	-25.03817	6.832175	-3.664215	0.0054
D (PLR)	-1.842015	0.691348	-2.664381	0.0265
CointEq(-1)*	-0.914207	0.132715	-6.889214	0.0001
R-squared = 0.849201 **Adjusted R-squared** = 0.728921 **DurbinWatson** = 2.478300				

Source: E-Views 10 Output, 2025

Table 3 summarizes the short-run ARDL model estimates on the impact of various SME financing sources and the cost of borrowing on small business growth (SBG). The variables include commercial bank credit to SMEs (CBCS), microfinance credit to SMEs (MFC), aid and grants to SMEs (AGSM), SME credit schemes (SMCS), and the prime lending rate (PLR).

The results show that CBCS, MFC, and AGSM have strong, positive, and statistically significant effects on sustainable development. Specifically, a 1% increase in CBCS, MFC, and AGSM corresponds, on average, to approximately 172%, 167%, and 175% increases in SBG, respectively, when other variables are held constant.

Conversely, both SMCS and PLR show negative and significant impacts on sustainable development. A 1% increase in SMCS and PLR leads to an estimated 189% and 18% decrease in SBG, respectively, indicating these may be less effective or inefficiently applied financing mechanisms.

The Error Correction Term (ECM), represented by CointEq(-1), is negative and statistically significant, confirming the model's ability to return to long-run equilibrium after short-term shocks. Approximately 91% of previous disequilibria are corrected in the following period, suggesting a rapid adjustment process.

With an R-squared of 0.849, the model explains about 85% of the variations in SBG, indicating a good model fit. The Durbin-Watson statistic of 2.478 confirms that there is no autocorrelation issue, validating the model's reliability.

Table 4: Long-Run Estimation Results

Dependent Variable: SBG

Variable	Coefficient	Std. Error	t-Statistic	Probability
LOG(CBCS(1))	-5.294812	3.702145	-1.430118	0.1732
LOG(MFC(1))	-15.16304	5.934201	-2.554317	0.0301
LOG(AGSM)	13.40219	5.991782	2.237134	0.0537
LOG(SMCS(1))	39.01568	9.735410	4.006249	0.0031
PLR	-3.462158	1.653219	-2.094651	0.0629
C	21.71894	81.10428	0.267864	0.7967

Source: E-Views 10 Output, 2025

Table 4 presents the long-run coefficients from the ARDL model, highlighting the sustained influence of various forms of SME financing and interest rates on small business growth (SBG).

The results indicate a positive and statistically significant long-run effect of aid and grants to SMEs (AGSM) and SME credit schemes (SMCS) on small business growth

In contrast, microfinance credit to SMEs (MFC) and the prime lending rate (PLR) show statistically significant negative effects on sustainable development. A 1% increase in MFC and PLR results in a 151% and 35% reduction in SBG respectively, under ceteris paribus conditions.

Commercial bank credit to SMEs (CBCS), while exhibiting a negative coefficient, is statistically insignificant.

The constant term (C) represents the intercept of the regression equation when all independent variables are zero.

These findings collectively highlight that while certain SME financing strategies such as AGSM and SMCS promote long term business growth.

Autocorrelation Test

Table 5: Q-Statistics for Serial Correlation Test

Autocorrelation	Partial Correlation		AC	PAC	Q-Stat	Prob*
. *| . |	. *| . |	1	-0.052	-0.052	0.1083	0.742
. |* . |	|* . |	2	0.093	0.090	0.4837	0.785
. *| . |	. *| . |	3	-0.067	-0.058	0.6932	0.875
. | . |	. | . |	4	0.041	0.023	0.7298	0.948
. *| . |	. *| . |	5	-0.139	-0.124	1.5410	0.907
. |* . |	. |* . |	6	0.140	0.117	2.3612	0.877
. | . |	. | . |	7	0.032	0.078	2.3765	0.930
.**| . |	.**| . |	8	-0.214	-0.269	4.7699	0.791
. *| . |	. *| . |	9	-0.090	-0.111	5.1674	0.821
.**| . |	.**| . |	10	-0.271	-0.284	8.8136	0.543
. | . |	. | . |	11	-0.012	-0.028	8.8263	0.639
. | . |	. | . |	12	-0.015	0.004	8.8471	0.710

Source: E-View Output, 2025

Table 5 presents the Q-statistics for testing serial correlation in the model residuals. The Q-statistic shows no autocorrelations as all p-values exceed are statistically insignificant indicating that no serial correlation in the residuals. This outcome implies the absence of serial correlation within the residuals of the model suggesting that the model's error terms are independently distributed over time thereby affirming the reliability and robustness of the model's dynamic specification.

Heteroskedasticity Test Table 6: Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.842715	Prob. F(18, 9)	0.6521
Obs*R-squared	14.78342	Prob. Chi-Square(18)	0.6849
Scaled explained SS	1.291875	Prob. Chi-Square(18)	1.0000

Source: E-Views, 2025

The heteroskedasticity test results using the Breusch-Pagan-Godfrey approach reveal a p-value for the F-statistic is 0.6849 for the Obs*R-squared equals 0.6849 and Scaled explained SS chi-square delivers 1.0000. Corresponding test statistic values were 0.842715, 14.78342, and 1.291875 respectively. Since all p-values exceed the conventional significance level, we fail to reject the null hypothesis of homoscedasticity. Therefore, the model does not exhibit evidence of heteroskedasticity indicating that the error terms have a constant variance.

Ramsey RESET Test

Table 7: Ramsey RESET Test Ramsey RESET Test Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.914583	10	0.2541
F-statistic	0.975201	(1, 10)	0.2541

Source: E-View Output, 2025

The Ramsey RESET test evaluates whether the functional form of the model is correctly specified and if any significant variables have been omitted. As presented in Table 7, the p-value of 0.2541 exceeds the 5% significance level, indicating no evidence of model misspecification. This suggests that the regression does not suffer from omitted variable bias. Therefore, the model is appropriately specified and its estimates are considered valid for inference, policy formulation and decision making purposes.

5. Discussion of Results

Studies on SME financing in Nigeria have produced varied insights regarding their influence on growth and sustainable development especially in terms of small business growth. Credit to Commercial bank credit to SMEs (CBCS) showed a positive effect in the short term. However, its long term impact was negative and lacked statistical significance. This diminished long term effectiveness is primarily due to high interest rates and stringent lending conditions imposed by banks which restrict SMEs' capacity to thrive and contribute meaningfully to economic sustainability. Despite its short term benefits, Commercial Bank Credit to SMEs (CBCS) potential to drive long term development remains constrained by these financial hurdles.

In contrast, microfinance loans to SMEs (MFC) yielded positive outcomes, their long term impact proved more favorable and contributing to small business growth and supporting sustainable development. This improvement is largely due to the more inclusive and flexible lending approaches of microfinance institutions which typically bypass the rigid collateral demands and harsh repayment terms seen in commercial banking. As a result, microfinance offers a viable path to enhancing SME productivity, generating employment and fostering gradual economic development.

Alternative financing approaches, including aid and grants (AGSM) and SME credit schemes (SMCS), also presented complex and sometimes counterintuitive outcomes. AGSM which initially intended to aid small business growth, instead correlated with worsening small business growth in both the short and long term likely due to corruption or misallocation of resources that prevented the funds from reaching actual SME operators. Similarly, SMC showed initial gains in aiding business growth, but its long term results were negative, underscoring the detrimental effects of policy inconsistency and ineffective credit administration.

Additionally, persistently high prime lending rates (PLR) emerged as a significant constraint, with consistent negative implications for both growth and development. These findings suggest that a deliberate reduction in lending rates for SMEs is crucial if Nigeria aims to achieve meaningful and long lasting effect for sustainable economic development.

6. Conclusion and Recommendations

This study explored the effect of credit guarantee schemes and their impacts on small business growth in Nigeria. The results indicated that microfinance credit, along with reduced lending rates plays a vital role in aiding small businesses, thereby contributing to sustainable development in the long term. In contrast, credit from commercial banks to SMEs showed no significant positive impact on the growth of small business development, a situation attributed to high interest rates and inflexible lending conditions. Notably, the SME credit scheme (SMCS) was identified as major determinants of development outcomes suggesting that when financial support is well structured and effectively regulated it can significantly drive economic progress.

In light of these findings, several policy actions are proposed to enhance the impact of SME financing in Nigeria. Regulatory authorities must ensure that both commercial and microfinance banks operate strictly within established guidelines. Instead of continuing the distribution of grants and aid—which often fail to reach actual

SME beneficiaries due to policy and process inefficiencies—the government should prioritize creating a supportive and enabling business environment.

Key areas of focus include maintaining stable macroeconomic policies, improving electricity supply, and fostering a more predictable political environment. These conditions not only encourage local entrepreneurship but also attract foreign direct investment and stimulate innovation across sectors. Furthermore, the Central Bank of Nigeria (CBN) should strengthen collaboration with microfinance institutions to provide grants and subsidized funding in ways that increase their capacity to effectively support SMEs.

Moreover, commercial banks should be mandated to prioritize SME lending as a central component of their credit portfolios in order to foster inclusive economic growth. This mandate should include the provision of single-digit interest loans to SMEs, as significantly reduced lending rates are essential for stimulating job creation, reducing poverty, and ensuring long-term economic resilience. Finally, all processes related to credit allocation and loan recovery must be transparent and consistently aligned with regulatory standards to strengthen accountability and build trust in the financial system.

References

1. Adegbite, S. A., & Machethe, C. L. (2020). Bridging the financial gap for small and medium enterprises in Nigeria: The role of microfinance. *Journal of Small Business and Enterprise Development*, *27*(2), 305–318. https://doi.org/10.1108/JSBED-01-2019-0016
2. Ademosu, A., & Morakinyo, A. (2021). Financial system and SMEs access to finance: a marketoriented approach. *Studia Universitatis Vasile Goldiș Arad, Seria Științe Economice*, *31*(3), 21-36.
3. Adeosun, O. T., & Shittu, A. I. (2022). Small–medium enterprise formation and Nigerian economic growth. *Review of Economics and Political Science*, *7*(4), 286-301.
4. Adeyemo, K. A., & Olateju, I. A. (2022). Impact of access to finance on the growth of small and medium enterprises in Nigeria. *International Journal of Business Systems and Economics*, *13*(7), 22-36.
5. Adhikary, B. K., Kutsuna, K., & Stephannie, S. (2021). Does the government credit guarantee promote micro, small, and medium enterprises? Evidence from Indonesia. *Journal of Small Business & Entrepreneurship*, *33*(3), 323-348.
6. Afolabi, M., Ikpefan, O. A., Osuma, G. O., & Evbuomwan, G. (2021). Impact of agricultural credit on economic growth in Nigeria. *WSEAS Transactions on Business and Economics*, *18*(52), 511-523.
7. Akintayo, A., Odeh, C. D., & Lawal, N. A. (2024). Credit accessibility and small and medium sized enterprises (SMEs) in Osun state, Nigeria. Global Business Management Review, 16(1), 1-18.
8. Arora, R. U., & Sarker, T. (2022). Financing for sustainable development goals (SDGs) in the era of COVID-19 and beyond. *The European Journal of Development Research*, *35*(1), 1.
9. Ashoro, C. O., Gbigbi, T. M., & Ovharhe, O. J. (2024). Financial inclusion and impacts on agriculture in Delta State, Nigeria. *GSC Advanced Research and Reviews*, *18*(02), 087096.
10. Ayadi, R. (2023). The Role of Guarantee Schemes in Promoting Financial Inclusion: The Impact of Digital Solutions.
11. Caselli, S., Corbetta, G., Cucinelli, D., Rossolini, M. (2021). A survival analysis of public guaranteed loans: Does financial intermediary matter? *Journal of Financial Stability, 54*. DOI: 10.1016/j.jfs.2021.100880
12. Corredera-Catalán, F., di Pietro, F., & Trujillo-Ponce, A. (2021). Post-COVID-19 SME financing constraints and the credit guarantee scheme solution in Spain. *Journal of Banking Regulation*, *22*(3), 250.
13. Ediri, E. A. (2024). Credit Financing Accessibility on Growth and Sustainability of Small and Medium Scale Enterprises (SMEs) In Nigeria, *GAS Journal of Economics and Business Management (GASJEBM)*, 1(4), 151-161.
14. Ediri, E. A. (2024). Credit Financing Accessibility on Growth and Sustainability of Small and Medium Scale Enterprises (SMEs) In Nigeria, *GAS Journal of Economics and Business Management (GASJEBM)*, 1(4), 151-161.
15. El-Yaqub, A. B., & Ismail, Y. (2025) Impact of Digital Currency on Deposit Money Bank in
16. Nigeria. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(1),

17. 1363 – 1377. DOI: https://dx.doi.org/10.47772/IJRISS.2025.9010114
18. El-Yaqub, A. B., Ismail, Y., & Bappayo, M. G. (2024) Impact of Financial Securities on Economic Growth in Nigeria. *ISRG Journal of Economics and Finance.* 1(4) (November-December) 2024. DOI: 10.5281/zenodo.14329117:
19. El-Yaqub, A.B., Ismail Y., & Eke, C. I., (2024) Impact of Commercial Bank Credit on Small and Medium Scale Enterprises in Nigeria: 1992 – 2022. *Global Scientific and Academic Research Journal of Economics, Business and Management.* 3(10), 25-36.
20. Etim, E., & Daramola, O. (2020). The informal sector and economic growth of South Africa and Nigeria: A comparative systematic review. *Journal of Open Innovation: Technology, Market, and Complexity*, *6*(4), 134.
21. European Comission. (2021). Survey on the access to finance of enterprises (SAFE). Ton Kwaak, Martin Clarke, Jan de Kok, Jacqueline Snijders, Stephanie Tollenaar, Sebastiaan Galesloot, Mei-Li Oliveira Sadilek.
22. European Investment Bank (2017). Credit Guarantee Schemes for SME lending in Western Europe. EIB Work Pap. 2017/42. https://www.econstor.eu/handle/10419/176672
23. Goodhart, C. A., Tsomocos, D. P., & Wang, X. (2023). Support for small businesses amid COVID-
24. 19. *Economica*, *90*(358), 612-652.
25. Gumel, B. I., & Bardai, B. B. (2021). Barriers to accessing financial institutions funding for Nigerian SMEs. *Babandi Ibrahim Gumel, Barjoyal Bin Bardai. Barriers to Accessing Financial Institutions Funding for Nigerian SMEs. International Journal of Business and Economics Research*, *10*(6), 219-226.
26. Ikem, O. C., Chidi, O. F., & Titus, I. T. (2021). Financial challenges of small and mediumsized enterprises (SMEs) In Nigeria: The relevance of accounting information. *Review of Public Administration & Management*, *1*(7), 248-276.
27. Ismail, Y., El-Yaqub, A.B. & Eke, C. I., (2025) Impact of Digital Payment Technologies on Selected Banking Institutions in Nigeria. *MSI Journal of Economics and Business*
28. *Management.* 2(4), 1-10. DOI: 10.5281/zenodo.15173057
29. Ismail, Y., Musa, I., & Magaji, S. (2025) Analysis of the Impact of Financial Inclusion on Small and Medium Enterprises (SMEs) in Nigeria. *MSI Journal of Economics and Business Management.* 2(2), 10-20. DOI:-10.5281/zenodo.14907488
30. Jimoh, A. A., & Oladejo, M. O. (2023). EVALUATION OF BARRIERS TO AUDITING OF
31. SMEs IN OYO STATE, NIGERIA. In *Proceedings of the 7 Th Annual International Academic Conference on Accounting and Finance Disruptive Technology: Accounting Practices, Financial and Sustainability Reporting*.
32. Joseph, T., Obikaonu, P., Ariolu, C., Nwolisa, C., & Aderohunmu, A. (2021). Smes intervention programmes in Nigeria: evaluating challenges facing implementation. *Applied Journal of Economics, Management and Social Sciences*, *2*(1), 16-25.
33. Joseph, T., Obikaonu, P., Ariolu, C., Nwolisa, C., & Aderohunmu, A. (2021). Smes intervention programmes in nigeria: evaluating challenges facing implementation. *Applied Journal of Economics, Management and Social Sciences*, *2*(1), 16-25.
34. Kadaba, D. M. K., Aithal, P. S., & KRS, S. (2023). Government initiatives and digital innovation for Atma Nirbhar MSMEs/SMEs: To achieve sustainable and inclusive economic growth. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, *8*(1), 68-82.
35. Lagoarde-Segot, T. (2020). Financing the sustainable development goals. *Sustainability*, *12*(7), 2775.
36. Langyintuo, A. (2020). Smallholder farmers' access to inputs and finance in Africa. In *The role of smallholder farms in food and nutrition security* (pp. 133-152). Cham: Springer International Publishing.
37. Magaji, S., Ismail, Y. & Musa, I., (2025) Impact of institutional Quality on Human Capital
38. Development in Nigeria. *MSI Journal of Economics and Business Management.* 2(2), 21-
39. 26. DOI:-10.5281/zenodo.14936039
40. Mishra, A. K. (2024). Government investment in agriculture and policy recommendations. *SP Swag: Sudur Paschim Wisdom of Academic Gentry Journal*, 1-10.
41. National Bureau of Statistics. (2020). *Micro, Small and Medium Enterprises (MSMEs) survey report*. https://www.nigerianstat.gov.ng

42. Nguyen, B., & Canh, N. P. (2021). Formal and informal financing decisions of small businesses. *Small Business Economics*, *57*(3), 1545-1567.
43. Nwokike, C., Udeoba, C. E., & Udegbunam, I. P. (2024). Effects of Financial Inclusion and Sustainable Economic Growth in Nigeria: The Role of Small and Medium-Sized Enterprises (SMEs).
44. Ochonogor, H. M. (2020). Microfinance institutions and economic development in Nigeria. *Nigeria Deposit Insurance Corporation. NDIC QUARTERLY*, *35*(1).
45. Odio, P. E., Kokogho, E., Olorunfemi, T. A., Nwaozomudoh, M. O., Adeniji, I. E., & Sobowale, A. (2021). Innovative financial solutions: A conceptual framework for expanding SME portfolios in Nigeria's banking sector. *International Journal of Multidisciplinary Research and Growth Evaluation*, *2*(1), 495-507.
46. Odio, P. E., Kokogho, E., Olorunfemi, T. A., Nwaozomudoh, M. O., Adeniji, I. E., & Sobowale, A. (2021). Innovative financial solutions: A conceptual framework for expanding SME portfolios in Nigeria's banking sector. *International Journal of Multidisciplinary Research and Growth Evaluation*, *2*(1), 495-507.
47. Odio, P. E., Kokogho, E., Olorunfemi, T. A., Nwaozomudoh, M. O., Adeniji, I. E., & Sobowale, A. (2021). Innovative financial solutions: A conceptual framework for expanding SME portfolios in Nigeria's banking sector. *International Journal of Multidisciplinary Research and Growth Evaluation*, *2*(1), 495-507.
48. Omowole, B. M., Olufemi-Phillips, A. Q., Ofodile, O. C., Eyo-Udo, N. L., & Ewim, S. E. (2024). The role of SMEs in promoting urban economic development: A review of emerging economy strategies. *Journal Name Unspecified*.
49. Omowole, B. M., Olufemi-Phillips, A. Q., Ofodile, O. C., Eyo-Udo, N. L., & Ewim, S. E. (2024). The role of SMEs in promoting urban economic development: A review of emerging economy strategies. *Journal Name Unspecified*.
50. Onwuchekwa, F. (2023). SMES and sustainable employment: a path to economic renewal in
51. Nigeria. *Interdisciplinary Journal of Linguistics, Marketing and Communication (IJLMC)*, *10*(3), 1-15.
52. Onwuchekwa, F. (2023). SMES and sustainable employment: a path to economic renewal in
53. Nigeria. *Interdisciplinary Journal of Linguistics, Marketing and Communication (IJLMC)*, *10*(3), 1-15.
54. Otokiti, B. O., Igwe, A. N., Ewim, C. P., Ibeh, A. I., & Sikhakhane-Nwokediegwu, Z. (2022). A framework for developing resilient business models for Nigerian SMEs in response to economic disruptions. *Int J Multidiscip Res Growth Eval*, *3*(1), 647-659.
55. Oyegbade, I. K., Igwe, A. N., Ofodile, O. C., & Azubuike, C. (2022). Advancing SME financing through public-private partnerships and low-cost lending: A framework for inclusive growth. *Iconic Research and Engineering Journals*, *6*(2), 289-302.
56. Pombo González, P., Molina Sánchez, H., Ramírez Sobrino, J. (2015). Los sistemas de garantía como instrumentos de política para la dinamización del crédito. AECA: Revista de la Asociación Española de Contabilidad y Administración de Empresas, 112, 8-10.
57. Rao, P., Kumar, S., Chavan, M., & Lim, W. M. (2023). A systematic literature review on SME financing: Trends and future directions. *Journal of Small Business Management*, *61*(3), 1247-1277.
58. Saari, D. (2020). Challenges faced by SMEs when accessing loans from financial institutions in Nigeria.
59. Santero Sánchez, R., Sepúlveda-Molina, A., de la Fuente Cabrero, C., & Laguna Sánchez, M. (2024). Credit Guarantee Schemes for Small and Medium Business: A Comprehensive Review of the Literature. *Credit Guarantee Schemes for Small and Medium Business: A Comprehensive Review of the Literature*.
60. Santero Sánchez, R., Sepúlveda-Molina, A., de la Fuente Cabrero, C., & Laguna Sánchez, M. (2024). Credit Guarantee Schemes for Small and Medium Business: A Comprehensive Review of the Literature. *Credit Guarantee Schemes for Small and Medium Business: A Comprehensive Review of the Literature*.
61. Sawitri, N. N. (2023). Financial Funding for Small and Medium-sized Enterprises (SMEs). *East Asian Journal of Multidisciplinary Research*, *2*(11), 4605-4614.
62. Sepúlveda-Molina, A., Fuente-Cabrero, C., Santero-Sánchez, R., Laguna-Sánchez, P. (2023). Credit Guarantee Schemes for Small and Medium Business: A Comprehensive Review of the Literature.
63. Shettima, M. B. (2021). Sustainability of micro, small and medium enterprise policies in Nigeria. *International Journal of Business and Globalisation*, *27*(4), 478-491.

64. Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), & National Bureau of Statistics (NBS). (2020). *MSME survey report 2020*. https://www.nigerianstat.gov.ng
65. United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. https://sdgs.un.org/2030agenda
66. Waniak-Michalak, H., Michalak, J., & Turała, M. (2020). Loan and guarantee funds: development, performance, stability. In *Loan and guarantee funds: development, performance, stability: Waniak-Michalak, Halina| uMichalak, Jan| uTurała, Maciej*. Łódź: Łódź University Press.
67. Yahaya, A. S., & Bello, M. A. (2021). The impact of government interventions on SME financing in Nigeria. *African Journal of Business Management*, *15*(4), 112–120. https://doi.org/10.5897/AJBM2021.9132
68. Yamori, N., & Aizawa, T. (2021). The impact of the first wave of the COVID-19 crisis on small and medium-sized enterprises and credit guarantee responses: Early lessons from Japan. *Covid Economics*, *63*, 186-200.
69. Yu, J., Peng, F., Shi, X., & Yang, L. (2022). Impact of credit guarantee on firm performance: Evidence from China's SMEs. *Economic Analysis and Policy*, *75*, 624-636.